

*Announcing...the new all-temperature*

# PIPE INSULATION

*PC Foamglas*

When you insulate with  
**FOAMGLAS**  
... you insulate for good



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PITTSBURGH CORNING CORPORATION





PC Foamglas Pipe Insulation is delivered to the job in two or four equal sections. For pipes of the larger diameters, each section may consist of two or more segments, cemented together. In all cases, installation is quick and easy.

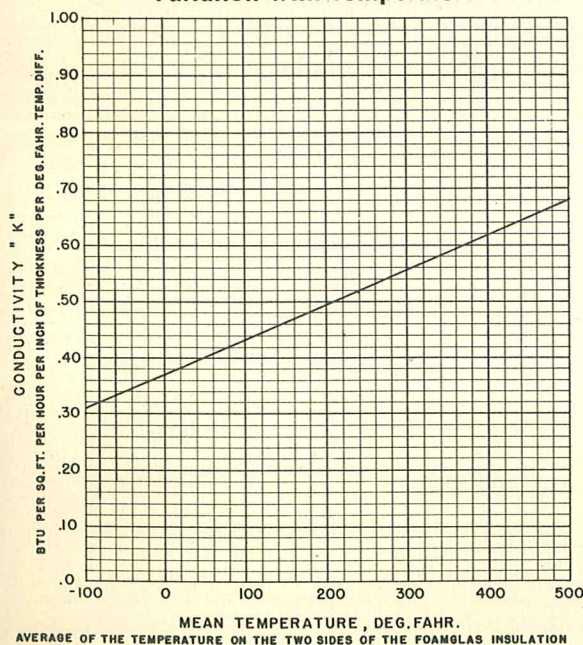


PC Foamglas Pipe Insulation can be cut to fit snugly right on the job, with ordinary tools.

For insulation of valves, flanges and fittings, PC Foamglas can be readily fabricated in the field from standard blocks.

## THERMAL CONDUCTIVITY

### Variation with Temperature



# PC FOAMGLAS PIPE

## *for Cold piping*

PC Foamglas is the only pipe insulation that can be used for both hot and cold lines, indoors and outdoors. Its cellular glass structure makes Foamglas a highly efficient insulating material. It is the ideal pipe insulation for processing industries where exact temperature control is required . . . wherever heat is to be retained or excluded. Because it is a quality product, Foamglas costs less on an annual basis than other insulations.

Because it is a true glass PC Foamglas is unaffected by humidity, is highly resistant to fumes, vapors, acid atmospheres and many elements encountered in process industries that cause other materials to lose their insulating efficiency. When installed according to our specifications for recom-

## LIST PRICES AND STANDARD THICKNESSES

Prices are per lineal foot of pipe and include packing F.O.B. shipping point with freight allowed to nearest railroad station.  
Discounts furnished on request.  
Terms: 2% 10 days—Net 30 days.

STANDARD IRON PIPE O. D. INCHES		NOMINAL 1" THICK			NOMINAL 1½" THICK		
Nominal	Actual	O. D. of Covering	Foamglas Thickness	List Price	O. D. of Covering	Foamglas Thickness	List Price
¼	.540	2.54	1.00	.50	3.54	1.50	1.00
⅜	.675	2.68	1.00	.50	3.68	1.50	1.00
½	.840	2.84	1.00	.50	3.84	1.50	1.00
¾	1.050	3.05	1.00	.55	4.05	1.50	1.10
1	1.315	3.32	1.00	.60	4.32	1.50	1.20
1¼	1.660	3.66	1.00	.65	4.66	1.50	1.30
1½	1.900	3.90	1.00	.70	4.90	1.50	1.40
2	2.375	4.38	1.00	.80	5.38	1.50	1.60
2½	2.875	4.88	1.00	.85	5.88	1.50	1.70
3	3.500	5.50	1.00	1.10	6.50	1.50	2.20
3½	4.000	6.00	1.00	1.40	7.00	1.50	2.60
4	4.500	6.50	1.00	1.80	7.50	1.50	3.00
4½	5.000	7.00	1.00	2.20	8.00	1.50	3.25
5	5.563	7.56	1.00	2.80	8.56	1.50	3.50
6	6.625	8.63	1.00	3.00	9.62	1.50	4.20
7	7.625	9.63	1.00	3.60	10.63	1.50	4.75
8	8.625	10.63	1.00	4.00	11.63	1.50	5.50
9	9.625				12.63	1.50	6.50
10	10.750				13.75	1.50	7.60
11	11.750				14.75	1.50	8.00
12	12.750				15.75	1.50	8.60
14	14.000				17.00	1.50	9.20
16	16.000				19.00	1.50	11.30
18	18.000				21.00	1.50	12.60
20	20.000				23.00	1.50	14.00
22	22.000				25.00	1.50	15.40
24	24.000				27.00	1.50	16.80
26	26.000				29.00	1.50	18.20
28	28.000				31.00	1.50	19.60
30	30.000				33.00	1.50	21.00
32	32.000				35.00	1.50	22.40
34	34.000				37.00	1.50	23.80
36	36.000				39.00	1.50	25.20

For Foamglas Insulation on cold work the following are equivalent designations: Nominal 1½" Thick . . . . . Light Duty or Ice Water  
Nominal 2" Thick . . . . . Standard Thick or Standard Brine  
Nominal 3" Thick . . . . . Heavy Duty or Special Brine  
Nominal 4" Thick . . . . . Nominal 4" or Extra Heavy Duty  
Nominal 1" Thick is not recommended for temperatures below 50°F.

# When you insulate with FOAMGLAS



# PIPE INSULATION

*for Hot piping*

mended applications, PC Foamglas retains its original insulating efficiency *permanently*.

PC Foamglas Pipe Insulation is waterproof and vaporproof. These properties eliminate the need for expensive vapor and weather protection, as well as the costs of maintenance and replacement. It is strong, rigid, light in weight, easy to cut and fit with ordinary tools, right on the job.

Another outstanding quality of PC Foamglas is its resistance to fire. It is non-combustible and acts as a fire retardant. PC Foamglas is listed by Underwriters' Laboratories, Inc., under Label Service, Guide No. 540 IO, January 21, 1948, File R2844.

## S FOR PC FOAMGLAS PIPE INSULATION

Items listed may be used through range from minus 350°F. to 800°F. For pipe sizes from 1/4" to 30" inclusive, Foamglas is furnished in two equal half sections; above 30" in quarter sections. All sections are 18" long.

PC Foamglas Pipe Insulation is packed for shipping in standard corrugated cartons. Approximate packed weight, 40 lbs. per carton.

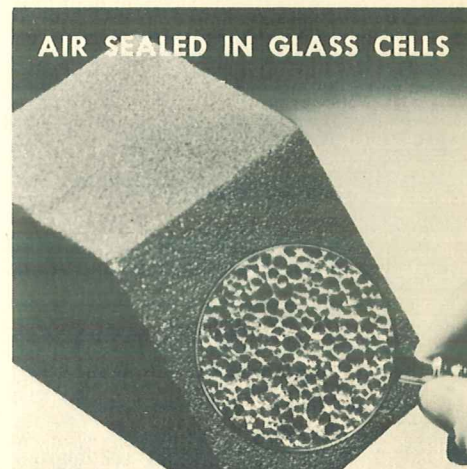
NOMINAL 2" THICK			NOMINAL 3" THICK			NOMINAL 4" THICK		
O. D. of Covering	Foamglas Thickness	List Price	O. D. of Covering	Foamglas Thickness	List Price	O. D. of Covering	Foamglas Thickness	List Price
4.54	2.00	1.20	6.04	2.75	2.00	8.54	4.00	3.00
4.68	2.00	1.20	6.18	2.75	2.00	8.68	4.00	3.00
4.84	2.00	1.20	6.34	2.75	2.00	8.84	4.00	3.00
5.05	2.00	1.30	6.55	2.75	2.30	9.05	4.00	3.00
5.32	2.00	1.50	7.32	3.00	2.80	9.32	4.00	3.20
6.66	2.50	2.00	7.66	3.00	3.20	9.66	4.00	3.50
6.90	2.50	2.30	7.90	3.00	3.40	9.90	4.00	3.70
7.38	2.50	2.40	8.38	3.00	3.80	10.38	4.00	4.20
7.88	2.50	3.00	8.88	3.00	4.00	10.88	4.00	4.90
9.00	2.75	3.50	9.50	3.00	4.50	11.50	4.00	5.30
9.50	2.75	3.80	10.00	3.00	5.30	12.00	4.00	5.80
10.00	2.75	4.00	10.50	3.00	5.60	12.50	4.00	6.50
10.50	2.75	4.60	11.00	3.00	6.40	13.00	4.00	7.20
11.06	2.75	5.20	11.56	3.00	7.20	13.56	4.00	7.70
12.13	2.75	6.00	14.63	4.00	8.40			
13.62	3.00	6.60	15.63	4.00	9.80			
14.62	3.00	7.50	16.63	4.00	11.20			
15.62	3.00	8.80	17.63	4.00	12.60			
16.75	3.00	11.00	18.75	4.00	14.00			
17.75	3.00	11.50	19.75	4.00	15.00			
18.75	3.00	12.00	20.75	4.00	16.00			
21.00	3.50	14.00	22.00	4.00	17.30			
23.00	3.50	15.40	24.00	4.00	19.60			
25.00	3.50	17.20	26.00	4.00	21.80			
27.00	3.50	19.00	28.00	4.00	24.00			
29.00	3.50	20.90	30.00	4.00	26.30			
31.00	3.50	22.80	32.00	4.00	28.60			
33.00	3.50	24.60	34.00	4.00	30.90			
35.00	3.50	26.50	36.00	4.00	33.20			
37.00	3.50	28.40	38.00	4.00	35.50			
39.00	3.50	30.20	40.00	4.00	37.80			
41.00	3.50	32.20	42.00	4.00	40.10			
43.00	3.50	34.20	44.00	4.00	42.40			

All orders should specify pipe diameter, insulation thickness and service temperature conditions.

PC Foamglas Insulation is also available in standard rectangular and circular segment blocks for use on process equipment, and for roofs, walls, and floors of buildings of all kinds.



The big sections of PC Foamglas Pipe Insulation are light in weight, yet rigid and strong.



The magnified cross section of PC Foamglas shows its cellular structure . . . glass bubbles solidified into strong, rigid blocks. In the millions of cells of glass-enclosed air, lies the secret of its insulating value.

### Properties of PC Foamglas Insulation

Absorption	.....0
Adsorption (Water)	.....005 lbs. per sq. ft. of surface area
Alkalinity	.....pH = 7.5
Capillarity	.....0
Coefficient of Expansion	.....0000045 (inches, feet, etc.) per °F. temperature change
Combustibility	.....Incombustible
Composition	.....A true glass—completely inorganic
Compressive Strength	.....150 lbs. per sq. in.
Flexural Strength	.....
(Modulus of Rupture)	.....130 lbs. per sq. in.
Impact Strength	.....66 foot lbs.
K (Conductivity at 50°F. Mean Temperature)	.....0.40 B.t.u./Hr./Sq. Ft./°F./In.
K (Conductivity at 300°F. Mean Temperature)	.....0.55 B.t.u./Hr./Sq. Ft./°F./In.
Resistance to Acids	.....Impervious to common acids and acid fumes
Shear Strength	.....64 lbs. per sq. in.
Weight	.....10.0 lbs. per cu. ft.

Values are average for design purposes based on the weight of 10.0 lbs. per cu. ft. Weight varies from 9.0 to 11.0 lbs. per cu. ft.

**GLAS . . . you insulate FOR GOOD !**



## APPLICATION DATA

**FOR HOT PIPING**—PC Foamglas Pipe Insulation is applied dry, without adhesive or cement, and fastened in place with  $\frac{1}{2}$ " x .015" metal bands (Type 430, Stainless Steel) on  $4\frac{1}{2}$ " centers.

For outdoor exposure, all joints are filled with sealing material as follows:

Pipe Temperature	Joint Sealer
Up to 300°F.	Foamglas Sealer No. 30-45 (Benjamin Foster Company)
300°F. and up	* 245 Carbonaceous Cement (National Carbon Company) or Lumnite Cement (Lumnite Div., Universal Atlas Cement Co.)

For indoor exposure, joint sealing may be omitted if desired.

Where expansion joints are specified, a compressive material such as asbestos wicking, mineral wool, etc., should be used. For outdoor exposure, the joints should be calked or covered with metal bands.

Foamglas requires no special weather protection. For appearance or to conform to color schemes, a finish may consist of a sprayed paint as follows:

Pipe Temperature	Finish
Up to 300°F.	Asphalt-Aluminum Paint
Above 300°F.	Bitumastic Hi Heat Gray Paint # 58100 (Koppers Co., Inc., Tar Products Div.)

For protection against impact or abrasion, standard metal, canvas or cement finishes may be applied over the insulation.

**FOR COLD PIPING**—PC Foamglas Pipe Insulation is applied directly to the surface of the pipe, with joints buttered with hot asphalt, cut-back asphalt or Foamglas Sealer No. 30-45. It is fastened in place with  $\frac{1}{2}$ " x .015" metal bands (Type 430, Stainless Steel) on 9" centers. No vapor cut-off, vapor seal or special finish is required.

*First cost is last cost* when you insulate with PC Foamglas. This permanent insulation has won wide acceptance through its service record in all sorts of plants, all over the country. Bring your individual pipe insulating problems to our engineering and research departments. They will tell you where and how you can use PC Foamglas to the best advantage.



®

# FOAMGLAS PIPE INSULATION

Manufactured by PITTSBURGH CORNING CORPORATION, 632 Duquesne Way, Pittsburgh 22, Pa.